

Notice of Allowability

Application No.

09/767,191

Examiner

Andrew W. Wahba

Applicant(s)

CHIU ET AL.

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/16/2004.
2. ☒ The allowed claim(s) is/are 1-6 and 8 (renumbered 1-7).
3. ☒ The drawings filed on 11/16/2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Carl Thomsen on 04/18/2005.

- Claim 7 has been canceled.
- Claim 9 has been canceled.

Allowable Subject Matter

2. Claims 1-6 and 8, (*renumbered 1-7*) allowed. The following is an examiner's statement of reasons for allowance:

With regard to claim 1, the prior art does not teach or fairly suggest whereupon the encoding structure values A_i will have k_i bits varied and thus the summation of the k_i bits associated with the encoding structure values is equal to n , ($\sum k_i = n$), wherein n stands for an index bit width of the multi-sectional encoding indexing method; and determining whether or not the encoding structure values A_i are transferred into $A_0 \text{ XOR } A_1 \text{ XOR } \dots \text{ XOR } A_{m-1}$ and if the encoding structure values A_i are transferred into the $A_0 \text{ XOR } A_1 \text{ XOR } \dots \text{ XOR } A_{m-1}$, then the bits of A_i , from $n - (\sum k_j + 1)$ to $n - \sum k_j$ will become variable ones.

With regard to claim 5, the prior art does not teach or fairly suggest adding or subtracting a certain value from the encoding structure values A_i''' and after adding or subtracting a certain value to or from the encoding structure values A_i''' , k_0 bits of an encoding structure values A_0'' and k_1 bits of the encoding structure values A_1'' change, wherein $\sum k_i = n$, in which n is a width of index bits; and operating on A_0 with A_1 by an exclusive-OR thereby producing output values which are different if different values are inputted and have a collision free effect.

With regard to claim 8 (*renumbered claim 7*), the prior art does not teach or fairly suggest wherein a base pointer (BP) of an input unit 0 is BP_0 , and input units of base pointers for other $r-1$ input ports is determined by the Table Bit Width (TBW) and Base Pointer (PB) of the pervious unit, using a formula $BP_i = BP_{i-1} + W * 2^{TBW}$ wherein the base pointer is calculated in order to compatibly allocate every section of the indexing table memory used by different input ports.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew W. Wahba whose telephone number is (571) 272-3081. The examiner can normally be reached on M-F 8:30-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on (571) 272-3126. The fax phone


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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully Submitted,

Andrew Wahba 
Patent Examiner
April 29, 2005



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